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     (FILE 'HOME' ENTERED AT 11:54:31 ON 19 AUG 1999)

     FILE 'MEDLINE, BIOSIS, WPIDS' ENTERED AT 11:56:00 ON 19 AUG 1999

     FILE 'MEDLINE, BIOSIS, WPIDS, CAPLUS' ENTERED AT 11:56:05 ON 19 AUG 1999
               E OBREMSKI R/AU
L1          43 S E3 OR E5 OR E6-7
               E SILZEL J/AU
L2          11 S E4-7
               E TSAY T/AU
L3          56 S E3 OR E9 OR E13-14
               E CERCEK B/AU
L4         266 S E3-4
               E DODSON C/AU
L5          20 S E3 OR E11
               E DODSON CHARLES/AU
L6           8 S E3-6
               E WANG T/AU
L7        1783 S E3 OR E31
               E WANG TUNG/AU
L8           1 S E9
               E LIU Y/AU
L9        8205 S E3-47
               E LIU YAGANG/AU
L10         14 S E3
               E ZHOU S/AU
L11       1397 S E3-29
               E ZHOU SHAOMIN/AU
L12        173 S E3
L13      11933 S L1 OR L2 OR L3 OR L4 OR L5 OR L6 OR L7 OR L8 OR L9 OR
L14     820004 S IMMUNOASSAY# OR ASSAY? OR IMMUNOCHEMICAL ANALYSIS
L15        466 S L13 AND L14
L16        390 DUP REM L15 (76 DUPLICATES REMOVED)
L17     564661 S CYANINE OR FLUORESC?
L18         20 S L16 AND L17
L19       6353 S BIND? (3A) MULTIPLE#
L20        969 S ANALYTE (3A) BIND?
L21        554 S LATERAL FLOW?
L22        152 S PROTEIN ARRAY?
L23          2 S L16 AND (L19 OR L20 OR L21 OR L22)
L24         21 S L18 OR L23

=> d bib ab 1-21


L24  ANSWER 1 OF 21  MEDLINE
AN   1999207673     MEDLINE
DN   99207673
TI   Determination of 4-hydroxy-2-nonenal in primary rat hepatocyte cultures
by
     liquid chromatography with laser induced fluorescence detection.
AU   Liu Y M; Jinno H; Kurihara M; Miyata N; Toyo'oka T
CS   Department of Chemistry, Jackson State University, MS 39217, USA.
SO   BIOMEDICAL CHROMATOGRAPHY, (1999 Feb) 13 (1) 75-80.
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Journal code: BIM. ISSN: 0269-3879.
CY ENGLAND: United Kingdom
DT Journal; Article; (JOURNAL ARTICLE)
LA English
FS Priority Journals
EM 199908
EW 19990802
AB An HPLC (high performance liquid chromatography) method with laser induced
fluorescence (LIF) detection is described for the determination of 4-hydroxy-2-nonenal (HNE) formed from lipid peroxidation in rat hepatocytes. Carbonyl compounds were **fluorescently** labelled by incubating the hepatocyte samples with a tagging reagent, 4-(2-carbazoylpyrrolidin-1-yl)-7-nitro-2,1,3-benzoxadiazole (NBD-ProCZ), at 60 degrees C for 10 min. The hydrazone derivatives were extracted with a C18 solid phase extraction (SPE) cartridge and separated on a reversed-phase HPLC column. The detection limit was 2.5 fmol or 0.5 nM (5 microL injection) of HNE in the cell homogenate. Method precision (C.V.) was 5% at the 5 nM level. The method has been used to determine free HNE in rat hepatocyte samples treated with several pro-oxidant toxins. A significant HNE increase (from 4 to 27.6 pmol/10(6) cells) was observed with the samples treated by allyl alcohol. The results were in accordance with those for malondialdehyde formation as measured by a thiobarbituric acid (TBA) **assay**.

L24 ANSWER 2 OF 21 MEDLINE
AN 1998401838 MEDLINE
DN 98401838
TI Mass-sensing, multianalyte microarray **immunoassay** with imaging detection.
AU **Silzel J W; Cercek B; Dodson C; Tsay T; Obremski R J**
CS Beckman Coulter, Inc., Brea, CA 92822-8000, USA.. jsilzel@beckman.com
SO CLINICAL CHEMISTRY, (1998 Sep) 44 (9) 2036-43.
Journal code: DBZ. ISSN: 0009-9147.
CY United States
DT Journal; Article; (JOURNAL ARTICLE)
LA English
FS Priority Journals; Cancer Journals
EM 199811
EW 19981103
AB Miniaturization of ligand binding **assays** may reduce costs by decreasing reagent consumption, but it is less apparent that miniaturized **assays** can simultaneously exceed the sensitivity of macroscopic techniques by analyte "harvesting" to exploit the total analyte mass available in a sample. Capture reagents (avidin or antibodies) immobilized
in 200-microm diameter zones are shown to substantially deplete analyte from a liquid sample during a 1-3-h incubation, and the **assays** that result sense the total analyte mass in a sample rather than its concentration. Detection of as few as 10(5) molecules of analyte per zone is possible by **fluorescence** imaging in situ on the solid phase using a near-infrared dye label. Single and multianalyte mass-sensing sandwich array **assays** of the IgG subclasses show the sensitivity and specificity of ELISA methods but use less than 1/100 the capture antibody required by the 96-well plate format.

L24 ANSWER 3 OF 21 MEDLINE
AN 1998334667 MEDLINE
DN 98334667
TI A splice variant of E2-2 basic helix-loop-helix protein represses the brain-specific fibroblast growth factor 1 promoter through the binding to an imperfect E-box.
AU **Liu Y**; Ray S K; Yang X Q; Luntz-Leybman V; Chiu I M
CS Department of Internal Medicine and Comprehensive Cancer Center, Ohio State University, Columbus, Ohio 43210, USA.
NC R01 CA45611 (NCI)
SO JOURNAL OF BIOLOGICAL CHEMISTRY, (1998 Jul 24) 273 (30) 19269-76.
Journal code: HIV. ISSN: 0021-9258.
CY United States
DT Journal; Article; (JOURNAL ARTICLE)
LA English
FS Priority Journals; Cancer Journals
EM 199810
EW 19981004
AB We previously demonstrated that a cis-element (-489 to -467) in the brain-specific fibroblast growth factor (FGF)-1 promoter (FGF-1.B) **binds multiple** nuclear factors, and this binding enhances transcriptional activity of this promoter. Here we report the isolation of three cDNA clones, VL1, VL2 and VL3, from a human brain stem cDNA expression library using four tandem repeats of the 26-base pair sequence (-492 to -467) as the probe. These cDNA clones represent the variant of bHLH protein E2-2/SEF2-1 in having 12 additional nucleotides encoding the amino acids RSRS. The glutathione S-transferase (GST) fusion proteins of VL1, VL2, and VL3 immunologically react with anti-E2-2 antibody and anti-GST-VL2 antibody. Electrophoretic mobility shift **assay** and methylation interference **assay** revealed that the GST fusion proteins specifically bind to an imperfect E-box sequence (GACCTG) present in the 26-base pair sequence. Transient expression of the full-length E2-2 without RSRS in U1240MG glioblastoma cells resulted in repression of FGF-1.B promoter activity. We further showed a significant repression of promoter activity (>40 fold) by E2-2 (lacking the amino acid sequence RSRS) when the E47 reporter construct, containing a hexameric E-box site, was used. In contrast, the E2-2 variant containing the RSRS sequence has no significant effect on either the FGF-1 promoter or E47 promoter. These results suggest that the relative abundance of the two splice variants of E2-2 in brain could be an important determinant for the expression of FGF-1.

L24 ANSWER 4 OF 21 MEDLINE
AN 1998259223 MEDLINE
DN 98259223
TI Polymerase chain reaction in the detection of patients infected by Chlamydia trachomatis after treatment.
AU Wang H; Wang J; **Liu Y**
CS Department of Dermatology, Peking Union Medical College Hospital, Beijing.
SO CHUNG-HUA I HSUEH TSA CHIH [CHINESE MEDICAL JOURNAL], (1997 Feb) 77 (2) 91-3.
Journal code: CDG. ISSN: 0376-2491.
CY China

DT Journal; Article; (JOURNAL ARTICLE)
LA Chinese
EM 199809
EW 19980901
AB OBJECTIVE: To investigate the value of polymerase chain reaction (PCR) for
follow-up patients infected by Chlamydia trachomatis. METHODS: Follow-up specimens were collected from 30 patients. Chlamydia trachomatis positive were detected by PCR and direct **fluorescence assay** test (DFA) in the 30 patients before therapy. 15 patients were treated with minocycline (100 mg twice daily) for 10 days, and 15 patients were treated with 1.0 g of azithromycine as a single oral dose. RESULTS: After 1-2 weeks of antimicrobial therapy, all patients had negative DFA for Chlamydia trachomatis, but 9 had positive Chlamydia trachomatis DNA as detected by PCR. CONCLUSIONS: The 9 specimens were not confirmed to livae viable organisms of Chlamydia trachomatis. The debris of nonviable Chlamydia trachomatis DNA was excluded from urinogenital tract at about one month.

L24 ANSWER 5 OF 21 MEDLINE
AN 1998182418 MEDLINE
DN 98182418
TI Intracellular calcium, DNase activity and myocyte apoptosis in aging Fischer 344 rats.
AU Nitahara J A; Cheng W; **Liu Y**; Li B; Leri A; Li P; Mogul D; Gambert S R; Kajstura J; Anversa P
CS Department of Medicine, New York Medical College, Valhalla, NY, 10595, USA.
NC HL-38132 (NHLBI)
HL-39902 (NHLBI)
AG-15756 (NIA)
SO JOURNAL OF MOLECULAR AND CELLULAR CARDIOLOGY, (1998 Mar) 30 (3) 519-35. Journal code: J72. ISSN: 0022-2828.
CY ENGLAND: United Kingdom
DT Journal; Article; (JOURNAL ARTICLE)
LA English
FS Priority Journals
EM 199807
EW 19980702
AB Myocyte apoptosis increases with age in Fischer 344 rats, but the multiple
molecular events implicated in this phenomenon remain to be identified. Several defects involving Ca2+ homeostasis, pH, and the expression of p53 and genes of the Bcl-2 protein family may contribute to the activation of myocyte death. Therefore, changes in intracellular pH, cytosolic Ca2+, DNase I and DNase II were measured in myocytes isolated by enzymatic digestion from rats of different ages. Moreover, the expression of p53, Bcl-2 and Bax in these cells was determined. Measurements of intracellular
pH by BCECF **fluorescence** at 3, 12 and 24 months showed that this parameter did not change with age: 3 months, 7.20+/-0.05; 12 months, 7.21+/-0.07; 24 months, 7.18+/-0.09. In contrast, diastolic Ca2+ determined by the Fura 2-AM method increased progressively from 99.8+/-1.9
nm at 3 months to 136.3+/-9.6 nm at 24 months (P<0.001). Concurrently, DNase I activity evaluated by plasmid digestion **assay** in myocytes increased 3.2-fold from 3 to 24 months (P<0.02). Conversely,

pH-dependent-DNase II remained essentially constant with age. Western blotting performed on ventricular myocytes did not detect significant changes in p53, Bax and Bcl-2 proteins with age. Similarly, immunocytochemically, the fraction of myocytes labeled by p53, Bax and Bcl-2 did not change from 3 to 24 months. In conclusion, myocyte aging is characterized by an increase in diastolic calcium which may activate DNase
I triggering apoptosis, independently from the expression of p53, Bax and Bcl-2 in the cells.Copyright 1998 Academic Press Limited

L24 ANSWER 6 OF 21 MEDLINE
AN 97282570 MEDLINE
DN 97282570
TI Probing the environment of tubulin-bound paclitaxel using **fluorescent** paclitaxel analogues.
AU Sengupta S; Boge T C; **Liu Y**; Hepperle M; Georg G I; Himes R H
CS Department of Biochemistry, University of Kansas, Lawrence 66045, USA.
NC CA 55141 (NCI)
SO BIOCHEMISTRY, (1997 Apr 29) 36 (17) 5179-84.
Journal code: A0G. ISSN: 0006-2960.
CY United States
DT Journal; Article; (JOURNAL ARTICLE)
LA English
FS Priority Journals
EM 199708
EW 19970801
AB To determine the environment of different positions in the paclitaxel molecule when bound to tubulin, we have synthesized six **fluorescent** analogues in which a (dimethylamino)benzoyl group has been introduced into the 7- and 10-positions, and the benzoyl groups at the 2- and N- as well as the 3'-phenyl ring have been modified with dimethylamino functions. In a tubulin assembly **assay**, the N-m- and N-p-(dimethylamino)benzoyl derivatives had activities comparable to the activity of paclitaxel. The 2-, 3'-, and 10-analogues had slightly reduced activity, and the 7-derivative was about 5% as active as paclitaxel. On the basis of the results of studies of the effect of solvents on the **fluorescence** emission spectra, it is proposed that the unbound analogues form hydrogen bonds with protic solvents. But the 7- and 10-substituted analogues appear to be more affected by protic solvents than the other analogues. Previously, we studied the binding of the N-meta derivative to tubulin and microtubules [Sengupta, S., et al. (1995) Biochemistry 34, 11889-11894]. In this study, we extended the studies to include the 2-, 7-, and 10-derivatives. Similar to the N-substituted analogue, binding of the 2-derivative to tubulin was accompanied by a large blue shift, whereas a very small shift occurred when the 7- and 10-substituted derivatives bound. The 2- and N-substituted
analogues bind to microtubules with an increase in **fluorescence** intensity over that which was observed with tubulin, whereas binding of the 7- and 10-substituted analogues was accompanied by a large quenching in **fluorescence**. This quenching may be due to the presence of charged residues in the protein near the 7- and 10-(dimethylamino)benzoyl groups or to pi stacking of the groups with an aromatic side chain. The presence of paclitaxel with microtubules prevented the **fluorescence** increase of the 2- and N-derivatives and quenching of the 7- and 10-derivatives. The difference in behavior of the **fluorescent** analogues upon binding to polymerized tubulin, coupled

with the solvent studies on the free drugs, suggests that the 2- and N-benzoyl groups of paclitaxel bind in a hydrophobic pocket of tubulin but could participate in hydrogen bonding, and the 7- and 10-positions are in a more hydrophilic environment.

L24 ANSWER 7 OF 21 MEDLINE
AN 97225490 MEDLINE
DN 97225490
TI Microdeletion oe chromosomal region 7Q11.23 in Williams syndrome.
AU Hou J W; Wang J K; **Wang T R**
CS Department of Pediatrics, National Taiwan University Hospital, Taipei, ROC.
SO JOURNAL OF THE FORMOSAN MEDICAL ASSOCIATION, (1997 Feb) 96 (2) 137-40.
Journal code: BLQ. ISSN: 0929-6646.
CY TAIWAN: Taiwan, Province of China
DT Journal; Article; (JOURNAL ARTICLE)
LA English
EM 199706
EW 19970602
AB We report two children with typical Williams syndrome facial appearance, growth deficiency and developmental delay. Both had supravalvular aortic stenosis (SVAS) and peripheral pulmonary stenosis (PPS), but no hypercalcemia. Chromosomal study in the first case, a 40-day-old girl, revealed a cytogenetically visible proximal interstitial deletion of the 7q11.22-11.23 segment. Another patient, a 3-year-old boy, with a normal karyotype, had milder phenotype with spontaneous remission of SVAS and PPS. Both patients showed allelic loss of the elastin (ELN) gene, exhibiting a submicroscopic deletion at 7q11.23, which was detected by **fluorescence** in situ hybridization (FISH). The results support the usefulness of FISH for detection of ELN gene deletion as an initial diagnostic **assay** for patients with SVAS or Williams syndrome. To our knowledge, these are the first cases of Williams syndrome in Taiwanese patients to be proven clinically, cytogenetically and by molecular analysis.

L24 ANSWER 8 OF 21 MEDLINE
AN 96316758 MEDLINE
DN 96316758
TI Channel electrophoresis for kinetic **assays**.
AU **Liu Y M**; Sweedler J V
CS Department of Chemistry, University of Illinois at Urbana-Champaign 61801, USA.
NC NS31609 (NINDS)
SO ANALYTICAL CHEMISTRY, (1996 Aug 1) 68 (15) 2471-6.
Journal code: 4NR. ISSN: 0003-2700.
CY United States
DT Journal; Article; (JOURNAL ARTICLE)
LA English
EM 199610
AB A rectangular channel electrophoresis system and a cylindrical sampling capillary combination allows chemical changes in nanoliter-volume samples to be monitored as a function of time. The electrophoretic microseparation is carried out in a rectangular channel with a 7 -cm-long, 40-microm x

2.5-cm geometry and is coupled to a 50-microm-i.d. cylindrical sample introduction capillary. The channel width dimension is used as a time axis by moving the outlet of the sampling capillary across the entrance of the separation channel. Detection of the separated analyte bands is achieved with laser-induced **fluorescence** and spatially resolved detection based on a charge-coupled device. The system is characterized with a series of **fluorescein** thiocarbamyl amino acid derivatives; limits of detection are < 10(-8) M for amino acids and 10(-9)M (425 zmol) for **fluorescein**. The ability to achieve a time-based dynamic microseparation is demonstrated by monitoring **fluorescent** product formation during the enzyme-catalyzed hydrolysis of **fluorescein** di-beta-D-galactopyranoside (FDG), a commonly used **fluorescent** substrate for enzymological studies.

L24 ANSWER 9 OF 21 MEDLINE
AN 96050796 MEDLINE
DN 96050796
TI Differentiation of borreliacidal activity caused by immune serum or antimicrobial agents by flow cytometry.
AU **Liu Y F**; Lim L C; Schell K; Lovrich S D; Callister S M; Schell R F
CS Wisconsin State Laboratory of Hygiene, University of Wisconsin, Madison 53706, USA.
NC AI-22199 (NIAID)
AI-30736 (NIAID)
SO CLINICAL AND DIAGNOSTIC LABORATORY IMMUNOLOGY, (1994 Mar) 1 (2) 145-9. Journal code: CB7. ISSN: 1071-412X.
CY United States
DT Journal; Article; (JOURNAL ARTICLE)
LA English
FS Priority Journals
EM 199603
AB We demonstrated that borreliacidal activity caused by immune serum and complement can easily be differentiated by flow cytometry from killing activity caused by antimicrobial agents that are commonly used for the treatment of Lyme disease. **Assay** suspensions containing normal or immune serum were incubated with Borrelia burgdorferi in the presence or absence of ceftriaxone, doxycycline, penicillin, and phosphomycin for 2, 8, 16, and 24 h. Samples containing killing activity were identified by using flow cytometry and acridine orange. In 30 min, the effects of immune serum and complement were easily distinguished from the killing of spirochetes by antimicrobial agents by adding **fluorescein** isothiocyanate-conjugated goat anti-hamster immunoglobulin. This simple procedure greatly enhanced the usefulness of the borreliacidal **assay** by eliminating a major source of false-positive reactions.

L24 ANSWER 10 OF 21 MEDLINE
AN 95359748 MEDLINE
DN 95359748
TI Cytogenetic investigations in trisomy 21 with reciprocal 4/9 translocation: report of a case.
AU Hou J W; **Wang T R**
CS Department of Pediatrics, National Taiwan University Hospital, Taipei, R.O.C..

SO JOURNAL OF THE FORMOSAN MEDICAL ASSOCIATION, (1994 Nov-Dec) 93 (11-12) 958-60.
Journal code: BLQ. ISSN: 0929-6646.
CY TAIWAN: Taiwan, Province of China
DT Journal; Article; (JOURNAL ARTICLE)
LA English
EM 199511
AB A 3-month-old male infant with Down's syndrome resulting from de novo trisomy 21 had an additional reciprocal translocation between the long arms of chromosomes 4 and 9: 47,XY,+21,rcp t(4;9)(q35;q22.3). Both C- and Ag-NOR bandings showed that the extra chromosome 21 was maternal in origin, but that the translocated chromosome 9 was from the father. To evaluate the nature of the translocation, **fluorescence** in situ hybridization (FISH) with whole chromosome painting probes (Coatasomes 4 &
9), followed by an enzymatic precipitation (HRP-DAB) **assay** was used. Whole chromosome FISH demonstrated the origin of the translocated region and clarified the karyotype. Enzymatic methods achieved the same result and were kept as a permanent record.

L24 ANSWER 11 OF 21 MEDLINE
AN 95236630 MEDLINE
DN 95236630
TI Interference in triiodothyronine (T3) analysis on the Immuno 1 Analyzer.
AU **Wang T**; Wan B S; Makela S K; Ellis G
CS Department of Clinical Biochemistry, University of Toronto, Ontario, Canada..
SO CLINICAL BIOCHEMISTRY, (1995 Feb) 28 (1) 55-62.
Journal code: DBV. ISSN: 0009-9120.
CY United States
DT Journal; Article; (JOURNAL ARTICLE)
LA English
FS Priority Journals
EM 199507
AB OBJECTIVE: To evaluate the interference in Triiodothyronine (T3) analysis on the Immuno 1 Analyzer. METHODS: We analyzed 686 samples for T3 using the Miles Technicon Immuno 1 Analyzer. We compared the results of 318 samples with those given by radioimmunoassay (RIA) and the remaining 368 results with those given by the Ciba-Corning ACS 180 analyzer. RESULTS: On
the Immuno 1 correlated with those by RIA or chemiluminescence **immunoassay**. However, results on eight patients by the Immuno 1 method were anomalously elevated. We attempted to find and eliminate the cause of the interference on the Immuno 1. Although the method uses an alkaline phosphatase labelled T3 analog and **fluoresceinated** monoclonal antibody, serum binding of **fluorescein** or alkaline phosphatase did not appear to be the major causes of the interference. Ethanol extraction of samples followed by reconstitution in zero calibrator was the only reliable way to eliminate the interference. CONCLUSION: The Immuno 1 **assay** was more prone to interference than other methods. Until it is reformulated, we recommend that users **assay** ethanol extracts of samples with unexpectedly high T3.

L24 ANSWER 12 OF 21 MEDLINE
AN 93113647 MEDLINE
DN 93113647
TI Cancer-associated SCM-recognition, immunedefense suppression, and serine

protease protection peptide. Part I. Isolation, amino acid sequence, homology, and origin.
AU Cercek L; **Cercek B**
CS Beckman Instruments, Inc., Applied Research and Advanced Development Department, Brea, CA..
SO CANCER DETECTION AND PREVENTION, (1992) 16 (5-6) 305-19.
Journal code: CNZ. ISSN: 0361-090X.
CY United States
DT Journal; Article; (JOURNAL ARTICLE)
LA English
FS Priority Journals
EM 199304
AB The isolation of a cancer-associated, SCM-recognition, immunedefense-suppressing, and serine protease-protecting (CRISPP) peptide from the blood plasma of cancer patients is described. The amino acid sequences were determined on preparations from 12 different cancers. The peptide is composed in 9 cancers of 29 and in 3 cancers of 35 amino acid residues with molecular weights of 3410 and 4007 Da, respectively. A consensus, synthetic 29 amino acid CRISPP peptide (CRISPPs) has the same cancer SCM-recognition (CR) activity and SCM-response modifying effects as the natural peptide. The "cancer SCM-recognition epitope" of the CRISPP peptide was determined. Anti-CRISPPs antibodies were raised and used in **immunoassays** to confirm the presence of the CRISPP peptides in cancer blood plasmas, in supernatants of cancer cell growth media and in cultured human cancer cells. The amino terminal end sequences of peptides isolated from growth media of cultured breast and colon cancer cells corresponded to amino acid sequences of CRISPP peptides isolated from cancer blood plasmas of subjects with the respective cancers. The CRISPP peptides are between 83 to 100% homologous to the alpha 1-protease inhibitor amino acid sequence located at the carboxy terminal end between residues 358 and 393. The genetic origin of the CRISPP peptides and their selective advantage to cancer cell survival are discussed.

L24 ANSWER 13 OF 21 MEDLINE
AN 92157820 MEDLINE
DN 92157820
TI A sensitive fluorometric **assay** for reducing sugars.
AU Chen F; **Liu Y**; Lu J; Hwang K J; Lee V H
CS Department of Pharmaceutical Sciences, School of Pharmacy, University of Southern California, Los Angeles 90033..
NC DK34013 (NIDDK)
CA37528 (NCI)
SO LIFE SCIENCES, (1992) 50 (9) 651-9.
Journal code: L62. ISSN: 0024-3205.
CY ENGLAND: United Kingdom
DT Journal; Article; (JOURNAL ARTICLE)
LA English
FS Priority Journals; Cancer Journals
EM 199205
AB A simple and rapid fluorometric **assay** for reducing sugars that is sensitive to the nanomolar range has been developed. The **assay** involves the derivatization of a given sugar with hydrazine at pH 3 to form a hydrazone, which is reacted with **fluorescamine** following adjustment of pH to first 9.4 and then 7.4. The amount of sugar in a sample is quantitated by measuring the **fluorescence** intensity at

an excitation wavelength of 400 nm and an emission wavelength of 490 nm. The **assay** is precise and reproducible, as indicated by intra- and inter-run variations of at most 3% and 4%, respectively. In addition to reducing sugars, the **assay** can also be used to measure aliphatic and aromatic aldehydes, but not acetone. Compared with an existing fluorometric sugar **assay**, the **assay** reported here does not require chromatographic separation of the **fluorescent** derivative from unreacted **fluorescamine**. The **assay** can, however, be potentially adapted for postcolumn detection of aldehydes, reducing sugars, and hydrazones in HPLC.

L24 ANSWER 14 OF 21 MEDLINE
AN 91192982 MEDLINE
DN 91192982
TI A seral epidemiological study of HIV transmitted through human seral gamma-globulin preparations.
AU Li J; Jiang D H; Wang L F; Zeng Y; Li D; Li G X; **Liu Y Y**; Shao Y M; Zhu Z Z; Kong J; et al
CS Jining Hygiene and Antiepidemic Station, 27 Jinig City, Shandong, People's Republic of China.
SO INTERNATIONAL JOURNAL OF EPIDEMIOLOGY, (1990 Dec) 19 (4) 1057-60. Journal code: GR6. ISSN: 0300-5771.
CY ENGLAND: United Kingdom
DT Journal; Article; (JOURNAL ARTICLE)
LA English
FS Priority Journals
EM 199107
AB In order to study the potential risk of transferring HIV through human seral gamma-globulin preparations (immunoglobulin), indirect immunofluorescent antibody test (IFA) and Western Blot (WB) **assay** were applied to 343 random samples (sera) with previous injection of imported human seral gamma-globulins (Ig) positive for Human Immunodeficiency Virus (HIV) antibodies between 1981-1987 for the detection of HIV antibodies. All results were negative and tests on all 23 controls who had previously received Ig made in China also gave negative results. However all 12 batches of imported Ig collected from the above-mentioned users, were positive for HIV antibodies when tested by WB and IFA. This study shows that under normal conditions, human seral gamma-globulin does not transmit HIV.

L24 ANSWER 15 OF 21 WPIDS COPYRIGHT 1999 DERWENT INFORMATION LTD
AN 1994-065834 [08] WPIDS
CR 1988-271139 [38]; 1989-292493 [40]; 1992-024362 [03]; 1994-248900 [30]
DNN N1994-051480 DNC C1994-029623
TI Antibodies against peptide(s) active in the structure of the Cytoplasmic Matrix (SCM) test - used in **immunoassay** to detect SCM cancer recognition factor and thus malignancy.
DC B04 D16 S03
IN **CERCEK, B**; CERCEK, L
PA (CERC-I) CERCEK B; (CERC-I) CERCEK L
CYC 21
PI WO 9403806 A1 19940217 (199408)* EN 103p
RW: AT BE CH DE DK ES FR GB GR IE IT LU MC NL PT SE
W: AU CA JP

AU 9350008 A 19940303 (199426)
EP 654144 A1 19950524 (199525) EN
R: AT BE CH DE DK ES FR GB GR IE IT LI LU MC NL PT SE
US 5516643 A 19960514 (199625) 34p
JP 08500107 W 19960109 (199642) 89p
ADT WO 9403806 A1 WO 1993-US7451 19930809; AU 9350008 A AU 1993-50008 19930809; EP 654144 A1 EP 1993-919940 19930809, WO 1993-US7451 19930809; US 5516643 A CIP of US 1987-22759 19870306, CIP of US 1988-167007 19880311, CIP of US 1990-539686 19900618, Cont of US 1992-927534 19920810,
US 1993-161176 19931203; JP 08500107 W WO 1993-US7451 19930809, JP 1994-505605 19930809
FDT AU 9350008 A Based on WO 9403806; EP 654144 A1 Based on WO 9403806; US 5516643 A CIP of US 5270171; JP 08500107 W Based on WO 9403806
PRAI US 1992-927534 19920810; US 1987-22759 19870306; US 1988-167007 19880311; US 1990-539686 19900618; US 1993-161176 19931203
AB WO 9403806 A UPAB: 19970417
Detection of a cancer recognition factor in a sample that may also contain
a partially homologous peptide sequence comprises: (a) incubating a first aliquot of the sample with a first antibody (Ab) specific for the cancer recognition factor, to bind the Ab to the factor and the homologous peptide sequence; (b) incubating a second aliquot of the sample with a second Ab specific for a portion of the homologous peptide lacking any homology with the factor, so the Ab only binds to the homologous peptide, and (c) comparing the quantity of the bound Abs in the 2 aliquots to detect the cancer recognition factor.

USE/ADVANTAGE - The Abs are specific for the SCM cancer recognition factor in samples such as body fluids and culture media. The Abs specific for SCM factor provide rapid, convenient and specific detection of the factor in cells and fluids. As these factors are associated with malignancy, **immunoassays** to detect them provide improved tests for cancer. The **immunoassays** can detect invariant portions of the factors that are virtually identical in factors isolated from all cancer-affected tissues. The 2 analyte **immunoassay** provides a sensitive and specific test for the factor, even in a background in which the serine protease inhibitor alpha-1 antitrypsin is present.
Dwg.1/4

L24 ANSWER 16 OF 21 WPIDS COPYRIGHT 1999 DERWENT INFORMATION LTD
AN 1992-414952 [50] WPIDS
CR 1987-348707 [49]; 1993-405163 [50]
DNN N1992-316492 DNC C1992-184139
TI Polarisation of measurement of bathochromic shifted **fluorescence** - with compensation for background emissions esp. for structure of cytoplasmic matrix **assay**.
DC B04 C07 J04 S03
IN **CERCEK, B**; CERCEK, L
PA (CERC-I) CERCEK B
CYC 1
PI US 5166052 A 19921124 (199250)* 27p
ADT US 5166052 A CIP of US 1986-867079 19860527, US 1988-222115 19880720
PRAI US 1986-867079 19860527; US 1988-222115 19880720
AB US 5166052 A UPAB: 19941128
Polarised, **fluorescent** emissions are measured from a **fluorescing** material in a sample including a background material also contributing **fluorescence**. The emission spectrum of the

background **fluorescence** is shifted relative to the emissions spectrum of the **fluorescing** material.

The sample is excited with plane-polarised light and the emissions measured at a primary wavelength in two transverse planes. Further measurements at a secondary wavelength (within the range of the wavelengths determined by the measured shift of the emissions spectrum due to background **fluorescence** emission) are made of the total **fluorescent** intensity.

From the measured values, the polarised **fluorescence** emission intensity in the first and second planes emitted by the background material at the primary wavelength is determined. These values are subtracted from the measured intensities in the two planes at the primary wavelength to obtain emission intensities solely due to the **fluorescing** material.

USE/ADVANTAGE - The method can detect many diseases in humans or animals by determining the presence of foreign substances, esp. in blood, e.g., lymphocytes. The method compensates for background extracellular **fluorescence** without filtration of the sample. The process is rapid and suited to automation.

Dwg.3/6

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L24 ANSWER 17 OF 21 WPIDS COPYRIGHT 1999 DERWENT INFORMATION LTD
AN 1992-024362 [03] WPIDS
CR 1988-271139 [38]; 1989-292493 [40]; 1994-065834 [08]; 1994-248900 [30]
DNN N1992-018586 DNC C1992-010536
TI New cancer recognition factor obtained from blood plasma - for peptide(s) and MAbs prepn., useful in SCM test for diagnosing cancer and in cancer therapy.
DC B04 D16 S03
IN **CERCEK, B**; CERCEK, L
PA (CERC-I) CERCEK B; (CERC-I) CERCEK L
CYC 22
PI WO 9119736 A 19911226 (199203)* 159p

=> d bib ab l24 17-21

L24 ANSWER 17 OF 21 WPIDS COPYRIGHT 1999 DERWENT INFORMATION LTD
AN 1992-024362 [03] WPIDS
CR 1988-271139 [38]; 1989-292493 [40]; 1994-065834 [08]; 1994-248900 [30]
DNN N1992-018586 DNC C1992-010536
TI New cancer recognition factor obtained from blood plasma - for peptide(s) and MAbs prepn., useful in SCM test for diagnosing cancer and in cancer therapy.
DC B04 D16 S03
IN **CERCEK, B**; CERCEK, L
PA (CERC-I) CERCEK B; (CERC-I) CERCEK L
CYC 22
PI WO 9119736 A 19911226 (199203)* 159p
RW: AT BE CH DE DK ES FR GB GR IT LU NL SE
W: AU CA FI JP KR NO
AU 9182877 A 19920107 (199217)

FI 9205736 A 19921217 (199312)
EP 537276 A1 19930421 (199316) EN 159p
R: AT BE CH DE DK ES FR GB GR IT LI LU NL SE
NO 9204844 A 19930216 (199320)
US 5270171 A 19931214 (199350) 45p
JP 05509308 W 19931222 (199405) 48p
WO 9119736 A3 19920220 (199510)
US 5443967 A 19950822 (199539) 75p
AU 665337 B 19960104 (199608)
IL 98455 A 19970110 (199715)
EP 537276 B1 19990303 (199913) EN
R: AT BE CH DE DK FR GB GR IT LI LU NL SE
DE 69130950 E 19990408 (199920)

ADT FI 9205736 A WO 1991-US4334 19910618, FI 1992-5736 19921217; EP 537276 A1 EP 1991-913428 19910618, WO 1991-US4334 19910618; NO 9204844 A WO 1991-US4334 19910618, NO 1992-4844 19921215; US 5270171 A CIP of US 1987-22759 19870306, CIP of US 1988-167007 19880311, US 1990-539686 19900618; JP 05509308 W JP 1991-512618 19910618, WO 1991-US4334 19910618; WO 9119736 A3 WO 1991-US4334 19910618; US 5443967 A CIP of US 1987-22759 19870306, CIP of US 1988-167007 19880311, Div ex US 1990-539686 19900618, US 1993-112760 19930825; AU 665337 B AU 1991-82877 19910618; IL 98455 A IL 1991-98455 19910611; EP 537276 B1 EP 1991-913428 19910618, WO 1991-US4334 19910618; DE 69130950 E DE 1991-630950 19910618, EP 1991-913428 19910618, WO 1991-US4334 19910618

FDT EP 537276 A1 Based on WO 9119736; JP 05509308 W Based on WO 9119736; US 5443967 A Div ex US 5270171; AU 665337 B Previous Publ. AU 9182877, Based on WO 9119736; EP 537276 B1 Based on WO 9119736; DE 69130950 E Based on EP 537276, Based on WO 9119736

PRAI US 1990-539686 19900618; US 1987-22759 19870306; US 1988-167007 19880311; US 1993-112760 19930825

AB WO 9119736 A UPAB: 19970122

Purified cancer recognition factor (A) is a peptide of at least 9 amino acids (AA), including a cone of 9AA with amphipathicity profile equiv. to that of F-L-M-I-D-Q-N-T-K (I). (A) produces at least a 10% decrease in the intracellular **fluorescence** polarisation (IFP) value of lymphocytes, capable of response in the structuredness of the cytoplasmic matrix (SCM) test, isolated from cancer patients.

Also new are (1) antibodies (A6) against (A); (2) recombinant DNA encoding (A); (3) vectors contg. such DNA;(4) host cells transformed with these vectors; (5) process for treating cancer by eliminating (A) from body fluids.

USE/ADVANTAGE - (A) can be used for diagnosis of cancer by detecting lymphocyte response in the scm test, or when labelled, by detecting specific receptors. A6 can be used to monitor the level of (A) in the body (by usual **immunoassay** methods and when labelled can be used for cell imaging or to target anticancer agents. Some (A) have natural-killer suppressive (NK5) activity, so can be used to measure the efficiency of anticancer agents in mixed cultures contg. NK cells. (A) also have an immunosuppressive action, e.g. to improve allograph survival. The new DNA can also be used for diagnosis. @(159pp Dwg.No.0/

L24 ANSWER 18 OF 21 WPIDS COPYRIGHT 1999 DERWENT INFORMATION LTD
AN 1989-278286 [38] WPIDS

DNN N1989-212483 DNC C1989-123216
TI Synthetic SCM-active cancer recognition peptide(s) - DNA probes and antibodies used to provide sensitive **assays** for detecting malignancy.
DC B04 D16 S03
IN **CERCEK, B**; CERCEK, L
PA (CERC-I) CERCEK B; (CERC-I) CERCEK L
CYC 13
PI WO 8908118 A 19890908 (198938)* EN 40p
RW: AT BE CH DE FR GB IT LU NL SE
W: JP
EP 402415 A 19901219 (199051)
R: AT BE CH DE FR GB IT LI LU NL SE
JP 03503051 W 19910711 (199134)
EP 402415 B1 19930210 (199306) EN 20p
R: AT BE CH DE FR GB IT LI LU NL SE
DE 68904904 E 19930325 (199313)
US 5231002 A 19930727 (199331) 13p
ADT WO 8908118 A WO 1989-US816 19890301; EP 402415 A EP 1989-904371 19890301; JP 03503051 W JP 1989-503861 19890301; EP 402415 B1 EP 1989-904371 19890301, WO 1989-US816 19890301; DE 68904904 E DE 1989-604904 19890301, EP 1989-904371 19890301, WO 1989-US816 19890301; US 5231002 A Cont of US 1988-163250 19880302, US 1990-581067 19900906
FDT EP 402415 B1 Based on WO 8908118; DE 68904904 E Based on EP 402415, Based on WO 8908118
PRAI US 1988-163250 19880302
AB WO 8908118 A UPAB: 19930923
The following are claimed: (A) an SCM (structuredness of cytoplasmic matrix)-active compsn. comprising only peptides having at least 7 amino acid residues including a sequence of Phe -Trp-Gly -R1 (R1=Ala or Val); (B) a DNA sequence corresponding to a peptide of at least 7 amino acid residues having SCM activity including the amino acid sequence of (A), (c) antibodies produced by covalently coupling (e.g. using a carbodiimide) the SCM-active compsn. of (A) to a high mol. wt. carrier (e.g. keyhole limpet hemocyanim) and immunising an animal with the resulting covalent conjugate, the antibodies being specific for the SCM-active compsn. (D) a cell producing antibody against the SCM-active compsn. of (A), (E) an immortal cell resulting from fusion of the antibody-producing cell of (D) with a myeloma cell (F) monoclonal antibodies produced by the cell of (E).

USE - The compsns. DNA probes and antibodies provide sensitive reproducible and simple **assays** for detecting malignancies esp. cancer, at an early stage.
0/0

L24 ANSWER 19 OF 21 WPIDS COPYRIGHT 1999 DERWENT INFORMATION LTD
AN 1988-271139 [38] WPIDS
CR 1989-292493 [40]; 1992-024362 [03]; 1994-065834 [08]; 1994-248900 [30]
DNN N1988-205871 DNC C1988-120711
TI Pure general cancer-associated SCM-recognition factor - comprising low. mol. wt. peptide obtd. from body fluids from donors afflicted with cancer.
DC B04 S03

IN **CERCEK, B**; CERCEK, L
PA (CERC-I) CERCEK B; (CERC-I) CERCEK L
CYC 19
PI WO 8806595 A 19880907 (198838)* EN 85p
RW: AT BE CH DE FR GB IT LU NL SE
W: AU DK FI JP KR NO
AU 8815951 A 19880926 (198851)
NO 8804919 A 19890220 (198916)
DK 8806161 A 19881104 (198918)
FI 8904220 A 19890906 (198949)
EP 357637 A 19900314 (199011) EN
R: AT BE CH DE FR GB IT LI LU NL SE
EP 357637 B1 19920617 (199225) EN 36p
R: AT BE CH DE FR GB IT LI LU NL SE
DE 3872235 G 19920723 (199231)
IL 85645 A 19931020 (199351)
FI 92832 B 19940930 (199439)
NO 177596 B 19950710 (199533)
CA 1336404 C 19950725 (199537)
ADT WO 8806595 A WO 1988-US568 19880304; EP 357637 A EP 1988-903494 19880304; EP 357637 B1 EP 1988-903494 19880304, WO 1988-US568 19880304; DE 3872235 G
DE 1988-3872235 19880304, EP 1988-903494 19880304, WO 1988-US568 19880304;
IL 85645 A IL 1988-85645 19880306; FI 92832 B WO 1988-US568 19880304, FI 1989-4220 19890906; NO 177596 B WO 1988-US568 19880304, NO 1988-4919 19881104; CA 1336404 C CA 1988-560590 19880304
FDT EP 357637 B1 Based on WO 8806595; DE 3872235 G Based on EP 357637, Based on WO 8806595; FI 92832 B Previous Publ. FI 8904220; NO 177596 B Previous Publ. NO 8804919
PRAI US 1987-22759 19870306
AB WO 8806595 A UPAB: 19970926

A pure general cancer-associated SCM-recognition factor consists of a low mol. wt. peptide passing through filters with a nominal 1000-dalton mol. wt. cutoff and retained by filters with a nominal 500-dalton mol. wt. cutoff, the factor producing at least a 10% decrease in the intracellular **fluorescence** polarisation value of SCM-responding lymphocytes from donors afflicted with cancer as measured by the standard SCH test.

Also claimed is a general cancer-associated SCM-recognition factor comprising only peptides having at least 13 amino acid residues including a sequence of

Phe-R1-Lys-Pro-Phe-R2-Phe- R3-Met-R4-R5-R6-R7

(where R1 = Asn or Gln; R2, R3, R4 = Val, Leu or Ile; R5 = Asp or Glu; R6, R7 = Asn or Gln).

USE - The SCM factor produces a positive response in potentially SCM-responding lymphocytes derived from donors having a variety of different types of malignancies. The factor provokes little or no SCM response in lymphocytes derived from donors free of malignancies and so can be used for general screening of blood samples for the presence of malignancy. The general cancer-associated SCM-recognition factor also decreases the spontaneous in vitro toxicity of lymphocytes toward malignant cells so that redn. of in vivo activity of the SCM-recognition factor should increase the efficiency of immunological surveillance by lymphocytes against malignant cells. The SCM-recognition factor can also be used for producing antibodies for treating body fluid, imaging cancer cells, directing an anti-cancer substance to cancer cells or in **immunoassays** to determine the level of factor in body fluids.

Dwg.0/0

L24 ANSWER 20 OF 21 WPIDS COPYRIGHT 1999 DERWENT INFORMATION LTD
AN 1982-95400E [45] WPIDS
TI Detecting specific binding pair components - by their ability to link **fluorescent** particle to quencher.
DC B04 J04 S03 S05
IN BECKER, M J; **LIU, Y P**; ULLMAN, E F
PA (SYNT) SYVA CO
CYC 13
PI EP 63852 A 19821103 (198245)* 44p
R: BE CH DE FR GB IT LI NL SE
JP 57179730 A 19821105 (198250)
CA 1174166 A 19840911 (198441)
EP 63852 B 19851121 (198547) EN
R: BE CH DE FR GB IT LI NL SE
DE 3267475 G 19860102 (198602)
IL 64574 A 19860131 (198610)
US 4650770 A 19870317 (198713)
JP 02049471 B 19901030 (199047)
ADT EP 63852 A EP 1982-300143 19820112; US 4650770 A US 1983-559555 19831207; JP 02049471 B JP 1982-22908 19820217
PRAI US 1981-258176 19810427; US 1983-559555 19831207
AB EP 63852 A UPAB: 19930915
Detection of an analyte (I) which is a member of a specific binding pair (a 'mip') comprises treating the test sample in aq. medium with (a) a mip-bound light-emitting particle (A) and (b) a mip-bound quencher particle (B), the mips present including at least one complementary pair. When (I) is present (A) and (B) are bound together via a mip bridge and the amt. of light emitted from (A) reduced in a manner determined by the (I) content. The emitted light is measured and compared with values from standards.

(A) is water insol. and has size at least 50 nm; particularly it is a **fluorescent** addn. polymer particle absorbing at above 350 nm and emitting at above 400 nm. (B) which is of similar min. size is esp. of charcoal.

In a modification no (B) is used and the change in light emission is caused by bonding of (A) to each other via mip bridges.

The method is used to detect low concns. of e.g. natural or synthetic drugs, cells, viruses, pollutants, etc., particularly proteins. No sepn. of bound and unbound fractions is needed, and a large change in detection signal is caused by a small change in (I) conc. Using (A) to which a specific antigen is bonded, the method can detect the corresp. antibody in serum even in presence of large amt. of other, non-specific, antibodies.

L24 ANSWER 21 OF 21 CAPLUS COPYRIGHT 1999 ACS
AN 1997:594877 CAPLUS
DN 127:259751
TI System for simultaneously conducting **multiple** ligand **binding assays**
IN **Obremski, Robert; Silzel, John W.**
PA Beckman Instruments, Inc., USA
SO PCT Int. Appl., 49 pp.
CODEN: PIXXD2

DT Patent
LA English
FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 9732212	A1	19970904	WO 1997-US2748	19970224
	W: JP				
	RW: AT, BE, CH, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE				
	EP 904542	A1	19990331	EP 1997-906727	19970224
	R: DE, FR, GB				

PRAI US 1996-609410 19960301
WO 1997-US2748 19970224

AB A system for simultaneously conducting multiple ligand assays on a sample potentially contg. target analytes uses as a detector a waveguide having thereon a plurality of probes, e.g., antibodies, of known recognition to the target analytes. The probes are in discrete areas on the waveguide. A sample contg. target analyte is treated with a light-responsive compd. such that it binds to the target analyte to form a conjugate and the conjugate is applied to the probes on the waveguide. A laser light is passed into the waveguide so that evanescent waves radiate from the waveguide. Where conjugate has attached to probe there is emission of light different from that emitted by a probe without conjugate attached thereto. An example describes the detn. of digoxin by using a polystyrene waveguide on which are printed spots of antidigoxin monoclonal antibodies, in addn. to the reagents biotinylated digoxin and fluorescent-labeled anti-digoxin antibodies.